

functions are added to the ear piece (sharp time, etc.), but would require a method to set and verify the internal clock.

**Conclusions, ramifications, and scope:**

By separating the alarm clock into a base station and autonomous ear-piece we obtain a wide variety of advantages.

(a) The ear piece becomes far smaller and more usable, particularly by virtue of eliminating displays and controls. This is such an overwhelming benefit that it makes it possible to construct a usable-sized ear-piece from off-the-shelf components. Even with productization and custom parts for quantity production, this is a substantial benefit.

(b) This approach eliminates dangerous wires, and removes any dependency upon the base station after the ear-piece is disconnected from it.

(c) The base station becomes able to support an unlimited number of ear-pieces, without any added complexity. Each ear-piece remembers its own settings, so that it may be simply turned "on" again for the next night.

(d) The ear-piece can simply count down from the time at which it is set, thus it has no need to maintain absolute accuracy over an extended time. A simple timing mechanism is sufficient.

**CLAIMS**

1) A timing system comprising a base station with means of providing settings and a separate piece with autonomous means to implement these settings when disconnected from the base station.

a) The above where used as an alarm.

d) The above where the autonomous part produces an audible alarm and sits near the user's ear.

c) The above where the autonomous part sits substantially in the user's ear.

2) A timing system comprising a base station with means of providing settings and a separate piece with autonomous means to implement these settings when disconnected from the base station, where the time reference in the autonomous part is reset when settings are changed, so that time accuracy must be maintained only over a single setting.

a) The above where the settings include designation of time for an alarm event.

b) The above where used as an alarm clock.

**SEQUENCE LISTING**

Not applicable.